

REMARKS

In response to the Official Action mailed March 18, 2004, Applicant amends his application and requests reconsideration. In this Amendment, no claims are canceled and claims 17-18 are added so that claims 1-18 are now pending. No new matter has been added.

Claims 10 and 14 are amended for clarity. Those claims now reflect that the occlusion information received by the display source is based at least partly on information received from other display sources (see paragraphs 46 and 61 of the patent application). Claims 17 and 18 are added to recite additional features of the invention. Those claims reflect that the different display source may be a downstream display source (see paragraph 61 of the patent application).

The Official Action rejects claims 1-9 and 15-16 as unpatentable over Applicant Admitted Prior Art (AAPA) in view of Yamada et al. (US Patent Pub. 2001/0008577, hereinafter Yamada). That rejection is respectfully traversed.

Yamada is directed to an apparatus and method for performing variable-speed reproduction of a decoded audio/video signal (see Abstract of Yamada). Each unit of audio data and video data in a data stream is assigned a timestamp indicating where the audio data and corresponding video data appear in that data stream (see paragraphs 80 and 81 of Yamada). An audio output control section 9 acquires a timestamp for a unit of audio data to be reproduced, and notifies a CPU 4 of the timestamp. The CPU 4 uses the timestamp to calculate and address for the corresponding video data, and notifies a video output control section 6 of the address (see paragraphs 80 and 81 of Yamada). These steps are repeated once every 33 ms so that the audio output control section 9 and the video output control section are prepared to present corresponding audio and video data in a synchronized manner once every 33 ms (see paragraphs 105 and 106 of Yamada).

By stark contrast, the present invention is directed to a video source that receives an estimated time when a future frame will be displayed on a display device. Thus, the video source is able to prepare the video data for the future frame based on the estimated amount of time until the future frame is rendered (see paragraphs 49 and 51 of the patent application). Unlike Yamada, where each video frame is prepared in accordance with a fixed 33 ms interval, the present invention receives an estimated time until the future frame is rendered (see paragraph 102 of Yamada). Accordingly, the present invention provides flexibility in synchronizing display sources that the prior art does not.

The Official Action contends that Yamada teaches receiving notification of an estimated time when a future frame will be displayed on the display device. Applicant respectfully submits

that the Official Action's contention is erroneous. In Yamada, the video output control section 6 does not receive notification of an estimated time when a future frame will be display. Instead, Yamada teaches that the video output control section 6 receives an address corresponding to the next video frame to be displayed. The video output control section 6 is designed to display that next frame 33 ms after the last frame was displayed (see paragraph 105 Yamada). The indication to display the next frame in 33 ms is neither an estimate nor received by video output control section 6 – it is simply designed or programmed to output the next frame at that fixed periodic interval.

Moreover, no part of Yamada teaches receiving notification of an estimated time. The timestamp is a recorded time of where the video frame appears in the video stream (see paragraph 101 of Yamada). When the CPU receives the timestamp information, it merely uses the timestamp to calculate the address of the video frame bearing that timestamp (see paragraph 101 of Yamada). Thus, the timestamp is also neither an estimated time, nor a time when a future frame will be displayed. For example, if a video frame appears at timestamp 5:42:312 (minutes:seconds:milliseconds) in a video stream, that does not suggest that the next frame, bearing a timestamp of 5:42:313, will be displayed in 1 ms. If the video stream is being reproduced at a different speed, as explicitly discussed in Yamada, that next frame may be output earlier or later than 1 ms. Thus, Yamada uses recorded timing information to synchronize the presentation of audio and video data at a fixed interval. However, in no way does the combination of AAPA and Yamada teach or suggest receiving notification of an estimated time when a future frame will be displayed.

Regarding claims 15 and 16, the Official Action does not specifically allege how the combination of AAPA and Yamada teaches or suggests receiving an estimated time of a next frame that is based on display timing information *acquired from the presentation surface set*. Applicant submits that the combination of AAPA and Yamada in fact does not teach or suggest that limitation. In Yamada, the alleged timing information is acquired by the CPU, not a display source, and is acquired from the video/audio decoder 5, not a presentation surface set (see Figure 1 and paragraph 91 of Yamada).

Thus, the combination of AAPA and Yamada fails to teach or suggest all of the limitations of claims 1-9 and 15-16. Accordingly, *prima facie* obviousness has not been established and the rejection should be withdrawn.

The Official Action rejected claims 10-14 as unpatentable over AAPA in view of Yamada and further in view of Wraae et al. (US Patent 6,628,297, hereinafter Wraae). That rejection is respectfully traversed.

The combination of AAPA, Yamada, and Wraae fails to teach or suggest a display source *receiving occlusion information* indicating that at least a portion of the display information will be occluded on the display device, *wherein the occlusion information is based at least in part upon display information from a different display source*, as recited by amended claims 10 and 14.

Wraae discloses that occlusion or overlapping detection is performed by an update module of an application program, and that the update module also performs the updating of the display (see column 6, lines 18-35 of Wraae). Thus, the update module of Wraae clearly does not receive this occlusion information, since it is the update module of the application program that performs the detection. Accordingly, the limitation of “receiving occlusion information” is not taught.

Furthermore, Wraae discloses the application program is responsible for managing and updating only those display objects rendered in response to the application program’s execution (see column 6, lines 29-33, and column 12, lines 13-29 of Wraae). Accordingly, Wraae does not teach that the occlusion information is based on anything other than the occlusion information associated with that application program (display source). That is, the application program can detect occlusion information about its own display objects, but it does not receive occlusion information from other application programs, and thus does not know if their display objects occlude its own. Thus, Wraae does not teach or suggest the limitation “based at least in part upon display information from a different display.”

Moreover, neither AAPA nor Yamada teaches receiving occlusion information that is based in part upon display information from another display source. The Official Action contends that Yamada teaches receiving notification that at least a portion of the display information will be occluded on the display device. That contention is clearly erroneous, and finds no support in Yamada, which says nothing of whether display information is occluded (see paragraphs 101, 105, 106, and 113).

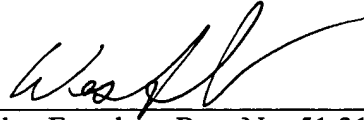
Thus, the combination of AAPA, Yamada, and Wraae fails to teach or suggest all of the limitations of amended claims 10-14. Accordingly, *prima facie* obviousness has not been established and the rejection should be withdrawn.

Applicant respectfully submits that the limitations of new claims 17 and 18 are not disclosed in the cited references.

In re Appln. of Nicholas WILT
Application No. 10/074,201

Reconsideration and withdrawal of the rejections are earnestly solicited.

Respectfully submitted,



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Date:

6/9/04

Amendment or ROA - Regular (Revised 9/03/03)